

HEART INSIGHT

AUGUST
2014
VOLUME 8
NUMBER 3

Healthy Living for Patients, Their Families & Caregivers

THE TRIAD TRIAGE TRIO

Working together
to beat heart
disease and
stroke

Helping a loved
one cope with
CHRONIC PAIN

Healthy body,
strong heart: The
benefits of **TAI CHI**

A late-summer
bounty of
**GARDEN-FRESH
RECIPES**

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Heart Insight (ISSN 1534-5917), an official publication of the American Heart Association (AHA), is published quarterly by Wolters Kluwer Health, at 16522 Hunters Green Parkway, Hagerstown, MD, 21740-2116. Editorial, business and production offices are located at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103. Contact: HeartInsight@wolterskluwer.com Website: www.heartinsight.com © 2014 by the American Heart Association

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To order bulk copies for your office, visit www.heartinsight.com and click on "Info & Services," then "Bulk Orders," send an email to heartinfo@wolterskluwer.com, or call 866-440-7557.

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POSTMASTER: Send address changes to Heart Insight, 16522 Hunters Green Parkway, Hagerstown, MD 21740.

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HEART INSIGHT

Features

4 THE TRIAD TRIAGE TRIO

Working together to beat heart disease and stroke
BY LINDA CHILDERS

8 FIGHTING CHRONIC PAIN

How you can help a loved one cope
BY CAROL PATTON

12 THE BENEFITS OF TAI CHI: HEALTHY BODY, STRONG HEART

How practicing Tai Chi can improve your heart health
BY MARK L. FUERST

HEART INSIGHT ONLINE BONUS

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HOW TAI CHI IMPACTS CARDIOVASCULAR RISK

BY MARK L. FUERST



Departments

3 ON MY MIND

HEART INSIGHT'S Editorial Board Chair, Michael A. Bettmann, M.D., F.A.H.A., fills you in on this month's issue

16 LIFE'S SIMPLE 7™

Modest lifestyle and behavioral changes that can improve your health

20 THE BOUNTY OF LATE SUMMER

Summer is waning, but your garden continues to produce like it's the height of the season! Try some of these heart-healthy recipes to help you enjoy the bounty of late summer.



20 Garden-Fresh Gazpacho

21 Broiled Salmon over Garden-Fresh Corn and Bell Peppers

22 Rosemary-Peach Chicken Kebabs with Orange Glaze

23 Baby Spinach and Tomato Salad with Warm Olive Vinaigrette

23 Sautéed Zucchini with Parmesan

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P 4-7: VADA DICEY PHOTOGRAPHY
P 8: KALI/ISTOCK PHOTO
P 12: YURI/ISTOCK PHOTO
P 15: KALU/ISTOCK PHOTO
P 18: NICOLAS MCCOMBER/ISTOCK PHOTO
P 17: MONKEYBUSINESSIMAGES/ISTOCK PHOTO
P 18: YURI/ISTOCK PHOTO
P 19: SIMPSON33/ISTOCK PHOTO
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Strength in numbers

Our cover story this month tells the story of three incredible individuals who, despite some serious health problems, banded together to help educate people about heart disease. The "Triad Triage Trio," made up of a stroke survivor, a heart attack survivor and a heart transplant recipient, share their inspiring stories of survival and provide tips for living a healthy, productive life after a life-changing cardiac event. You won't want to miss their story, starting on page 4.

We also have a compelling story for caregivers, "Fighting Chronic Pain," on page 8. This article covers how caregivers can help their loved ones deal with a very real complication that can occur in individuals with cardiac (and other) problems: chronic pain. And for those of you looking for an appropriate, easy-to-perform physical activity that has many heart benefits, check out "The Benefits of Tai Chi: Healthy Body, Strong Heart" on page 12. You'll learn all about this fantastic exercise that combines physical activity, stress reduction, emotional regulation, improved breathing efficiency and social support. Although no activity is perfect for everyone, this moderate-intensity activity may be just what you've been looking for!

"Life's Simple 7," on page 16, provides information on modest lifestyle and behavioral changes that can help you to not only live a longer but also a healthier life: quantity AND quality is the aim! In this issue, you'll learn how to navigate your local farmers market; discover the best time of day to exercise; find out if you're at risk for high cholesterol; understand what you should (and shouldn't) eat if you have diabetes; and learn if e-cigarettes can help you quit smoking. And be sure to try our late-summer bounty of heart-healthy recipes, starting on page 20, using fresh summer ingredients!

Don't forget to visit us at HeartInsight.com and read our online-only bonus article, "How Tai Chi Impacts Cardiovascular Risk Factors." Also download and follow us with the free HEART INSIGHT app, available for Apple devices.

I'm very interested in hearing your thoughts and suggestions about how we can make this magazine even better, so please e-mail me at HeartInsight@wolterskluwer.com or write to HEART INSIGHT, Two Commerce Square, 2001 Market St., Philadelphia, PA 19103. You can also follow us on Twitter: twitter.com/Heart_Insight.

With best wishes for good health,

MICHAEL A. BETTMANN, M.D., F.A.H.A.
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The Triad Triage Trio

*Working together to
beat heart disease
and stroke*

BY LINDA CHILDERS

In a crowded church in Greensboro, North Carolina, all eyes are on the podium as two men and a woman recount their personal tales of survival. The three aren't delivering a sermon but rather a cautionary tale—all have waged a battle against heart disease and/or stroke and are sharing their experiences in the hope of educating others about the number-one and number-four killers of men and women in the United States.

David Layton, a stroke survivor, travels to venues across North Carolina accompanied by Anne Howell, a heart transplant recipient,



and Randy Ludington, a heart attack survivor. They call themselves the "Triad Triage Trio," and their mission is to share the information about cardiac risk factors they wish they had known years ago.

"Prevention is so much easier than recovery," says Layton, who was 55 when he suffered a massive stroke in 1999. A former pack-a-day smoker

who worked in a high-stress job and had high blood pressure, Layton still remembers the day he awoke feeling dizzy and fighting blurred vision.

"I didn't realize I was having a stroke because I wasn't aware of the warning signs and symptoms," he says. Layton was taken to the hospital later that day where doctors determined that he had experienced a small brain hemorrhage (a type of stroke). In the emergency room, Layton suffered a larger brain hemorrhage that took away all functional use of his left arm and hand.

While in the hospital, Layton learned how smoking increases the risk of stroke two to four

times, and he vowed that day to kick the habit. He also learned that uncontrolled high blood pressure, or hypertension, increases a person's stroke risk. Over time, hypertension leads to disease of the large and small arteries of the brain. This, in turn, can lead to a weakening of the blood vessels in the brain, causing rupture of the blood vessels and then a brain hemorrhage.

"Two months before I suffered a stroke, I had lost 35 pounds and my doctor had taken me off high blood pressure medication," Layton says. "I thought I had my hypertension under control, but I learned that my risk of stroke also increased with age and certain lifestyle factors."

Layton viewed his stroke as a wake-up call and vowed to take control of his health. He knew that having a stroke put him at risk of having another, and he also hoped to share his story with others in the hope they might benefit.

"After my stroke, I told my family to give me six weeks until I was good as new," Layton says. "The reality was it took much longer than that. I had to learn how to swallow and to walk again, and I underwent both speech and physical therapy."

Layton spent six weeks in the hospital and 18 months in outpatient therapy. When he wasn't working on his own recovery, he was serving as a cheerleader to other stroke survivors and their caregivers.

"I've met with over 3,000 stroke survivors and their families to let them know that it's possible to lead a fulfilling life after a stroke,"



says Layton. He founded the website singlehandedliving.com to inform other stroke survivors how to successfully navigate exercise, hobbies and other activities of daily living. "I also began making presentations about stroke risk reduction to any and all groups that invited me to speak."

Intent on reducing his chances of having another stroke, Layton made it a priority to change his lifestyle. While he had long been sedentary, he developed an appreciation for exercise during his outpatient therapy.

"After I completed rehab, I joined a gym and started swimming," he says. "I swam 32 laps two to three days a week using only my right arm."

Layton also eliminated fatty foods from his diet and learned how to reduce stress through exercise and prayer. He credits his wife of 47 years, Charlotte, with helping him to continue making positive lifestyle changes and meeting his goals.

"I couldn't have asked for a better wife or caregiver," he says.

LIFE AFTER A HEART ATTACK

At an American Heart Association function in 2001, Layton met Randy Ludington, a heart attack survivor who expressed an



interest in joining him to spread the message about cardiac risk factors and prevention.

"Over the next several years, Randy and I spoke to as many civic and church groups as we could," Layton says. "Many of our speaking engagements were arranged through the Greensboro office of the American Heart Association."

Clyde Yancy, M.D., Northwestern Memorial Hospital's chief of cardiology and associate director of clinical programs at Northwestern's Bluhm Cardiovascular Institute in Chicago, says it's imperative that people know their cardiovascular risk factors.

"Eighty percent of the risk factors associated with heart disease are modifiable, meaning they can be changed or treated," Yancy says. "This includes quitting smoking and managing high cholesterol, high blood pressure and diabetes."

Yancy notes that 20 percent of cardiac risk factors are considered "non-modifiable" because they can't be changed. These include advanced age, gender, family history of heart disease and race.

"Some of the most important steps that people can take to lower their cardiac risks include stopping tobacco use, maintaining

a healthy weight, getting at least 150 minutes of moderate intensity physical activity per week, avoiding *trans* fats and eating less saturated fat and more produce and fiber," he says. "I encourage my patients to aim for a Body Mass Index (BMI) close to 25; hard to get there but anything close is still a good outcome."

Yancy adds that maintaining a healthy weight can also go a long way in improving cardiac risk factors such as elevated cholesterol and blood sugar, and high blood pressure.

"One of the easiest ways to lose weight is to cut your portion sizes in half," he says. "You don't have to go on a fad diet, just eat half the amount of food on your plate."

LEARNING FROM A HEART ATTACK

For Ludington, who suffered a heart attack in May 2000, speaking out on heart disease was also a way to let others know that cardiac symptoms can vary greatly from one person to another.

"Several days prior to my heart attack, I experienced a pinching feeling across my shoulders, but I never had the shortness of breath or intense chest pressure that often accompany a heart attack," he says. "I originally thought I had a pinched nerve."

Only 52 at the time of his heart attack, Ludington admits cardiac disease wasn't even on his radar. He still remembers the morning he awoke with shoulder pain that intensified as the day went on, and how the pain began to radiate down his left arm.

"I didn't lose consciousness but the pain was so severe," Ludington says. "In addition to my shoulder and arm, I began feeling pain in my jaw and teeth."

Ludington's pain landed him in the emergency room where an angiogram showed he had suffered a heart attack. A subsequent test revealed that Ludington's arteries were blocked. Doctors inserted a stent, a small mesh tube to support the inner artery wall and to reduce the chances of the arteries becoming blocked again. Ludington was also told he needed to make some lifestyle changes in order to avoid another life-threatening attack.

"My doctor said if I didn't quit smoking I'd be back in the hospital within two years, so I quit cold turkey that same day," Ludington says. "I was also overweight and led a sedentary lifestyle so I started [watching what I ate] and lost 40 pounds in three months."

Ludington also joined a gym where he began working out on the treadmill and doing low-impact aerobics three days a week. He also changed his eating habits. Before his heart attack, Ludington admits that he primarily ate starchy foods and didn't pay attention to portion sizes. Today, at 66, he adheres to a diet that emphasizes quality over quantity, and is composed of lean beef, chicken and fish, and a variety of vegetables.

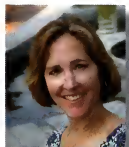
The Trio's mission is to share information about cardiac risk factors they wish they had known years ago.

In retrospect, Ludington wishes he had made lifestyle changes years ago. Even though his own father had died of heart disease in 1977 at the age of 58, Ludington never believed he was at risk.

"My doctor used to tell me that my cholesterol was high and that I should lose weight and quit smoking but I thought I was immune to heart disease," he says. "Today, I take a statin for my cholesterol and am very proactive about my health. When we speak to groups, I tell people that while no one is super human, we can take steps to reduce our risk of heart disease."

A TRANSPLANT SURVIVOR JOINS THE GROUP

In 2011, while waiting for the Annual High Point Christmas Parade to start in Greensboro, Layton and Ludington met **Anne Howell**, a former teacher and heart transplant recipient who was also in the



parade representing the American Heart Association.

"After we heard Anne's survival story and learned she was raising two active teenagers as a single parent while also participating in triathlons, we knew we had to add her to our group," Layton says.

The group called themselves the "Triad Triage Trio"—*triad* being the

geographical name of their area in North Carolina made up of Greensboro, High Point and Winston Salem, and *triage* referring to the medical action necessary in an emergency situation to minimize losses and maximize survival.

With Howell rounding out the group, the trio was able to include a woman's perspective, an important component since one in every four women dies from heart disease. Howell was also able to talk about transplants and inherited risk factors for heart disease.

"My mother died in 1981 at age 41 of sudden cardiac death," Howell says. "We didn't know at the time that she had an enlarged left ventricle, known as cardiomyopathy, which caused her fatal rhythm, or that two of her four daughters, my sister Jane and I, had inherited the condition."

Howell was 28 and in the best shape of her life when she started feeling sick while running a 10K race in February 1993.

"Around mile 5.9 I got dizzy and collapsed to the ground," she says. "As an avid athlete, I knew something was seriously wrong."

As her heart raced, Howell managed to stumble to the finish line, where paramedics checked her vitals and rushed her to the hospital. Howell was given fluids and told to make an appointment

immediately for an electrophysiology study, a test that records the electrical activity and the electrical pathways of the heart.

"I failed the test and was told I needed to have a defibrillator implanted, a small device placed in the chest, that would use electrical pulses to help control my arrhythmias and prevent sudden cardiac arrest," Howell says.

Over the next 16 years, Howell saw doctors frequently who checked on the progress of her degenerative disease.

"I was slowly getting worse and because of the gradual decline, I just didn't know how poorly I was feeling," she says. "I just knew that I felt tired all the time and was unable to play with my two young sons."

Howell received four replacement defibrillators in 16 years, when the batteries in her device would wear out. Eventually her heart deteriorated to the point where a transplant was her only option for survival.

"My medicines were no longer holding the disease at bay and in January 2008, I met with a transplant team at Wake Forest University Baptist Medical Center," Howell says. "I was still in denial that I had gotten to that point in my treatment. I didn't realize how sick I truly was, even though I had several bouts of congestive heart failure and several hospitalizations between January 2008 and March 2009."

Doctors began administering a series of exams, tests and procedures and put Howell on the waiting list for a heart transplant. She was approved and was added to the waiting list for a transplant on March 30, 2009. On October 5, 2009, Howell was admitted to the hospital as her condition continued to deteriorate.

On October 7, the mother of two was told a heart donor had been found, and Howell remembers it being a bittersweet day.

"I was so very, very sad for the person whose life was lost, and I felt so much sorrow for that person's family," she says. "Yet another part of me was relieved to think I might have a normal life again."

Although her recovery was long and her legs shaky when she first started walking, Howell, now 49, has reclaimed her life. In August 2011, she completed a triathlon in Winston-Salem and she also enjoys cycling for an hour each day and swimming. Most of all she appreciates spending quality time with her teen sons, Adam and Emory.

"On my bike rides, I pass High Point University's billboard that states, 'Choose to be Extraordinary!' I am trying to be extraordinary and share my miracle with others," says Howell, who has also returned to college to pursue a career as a cardiac sonographer. "I've been given a second chance at life and I want to make the most of it!" ■

Fighting chronic pain

BY CAROL PATTON

For the past seven years, Stuart Smith has been caring for his wife, Ellen, who suffers from congestive heart failure and Ehlers-Danlos syndrome, a genetic disorder that affects the connective tissues—mainly the skin, joints and blood vessel walls. Every day, Ellen feels pain in her back and joints and can't perform simple tasks like cutting her own food because the pain is so severe.

"It's as much emotional pain as it is physical pain," says Smith, who lives in N. Scituate, Rhode Island. "I don't think there's anything more frustrating in the world or emotionally pain-inducing than seeing somebody you love in pain."

Approximately 100 million Americans suffer from chronic pain, which occurs when pain signals in the body consistently fire in the nervous system for weeks, months or years, according to the American Academy of Pain Medicine. The emotional side effects can be just as unforgiving, causing a variety of conditions like depression, fear and anxiety.

Many rely on pain pills prescribed by their healthcare providers, which minimize the intensity of pain signals reaching the brain, including areas of the brain that control emotion. But no pain medicine is without side effects like nausea, fatigue and potential liver or kidney damage. Even over-the-counter drugs like aspirin or ibuprofen (Advil™, Motrin™) taken over long periods of time have been linked with an increased risk of cardiovascular disease.



How you can help a loved one cope

Although painkillers work wonders, most people dealing with chronic pain can do better. There are many alternative approaches that can be safely combined with their medication regimen, self-care and caregiver support. While they may not be able to deliver the knockout punch to defeat the pain, at least they can help someone in pain go the distance.

HEAVYWEIGHTS

People with heart disease and chronic pain are commonly prescribed painkillers called opioids or narcotics like codeine, oxycodone or hydrocodone, says Lynn R. Webster, M.D., clinical researcher and president of the American Academy of Pain Medicine.

"All people with chronic illness, whether they have heart disease, diabetes or cancer, are also at risk of having chronic pain," he says. "Opioids may be one of the medications that are prescribed. We know that we have a prescription drug problem in this country and a tragic number of people die from the use of these medications."

The misuse and abuse of prescription painkillers accounted for more than 475,000 hospital emergency room visits in 2009. Worse yet, nearly 15,000 people died from prescription painkiller overdoses in the United States in 2008, more than cocaine and heroin combined, according to the latest figures from the Centers for Disease Control and Prevention.

Still, pain medicines help make it a fair fight. Webster offers the following tips on how to use opioids safely and responsibly:

- Never take a pain pill that isn't prescribed. The strength or dosage may not be appropriate or you may react differently than someone else.
- Never take more medicine than prescribed. "A lot of people think if you take one pill, you get some relief, so two can be acceptable," Webster says. "That's not the case with opioids. It can be lethal if you take more than what has been instructed or directed."
- Avoid drinking alcohol because it increases the toxicity of opioids.
- Tell your doctors about all medicines you've been prescribed to prevent adverse drug reactions.

Training Camp

Pain pills are only half the story when it comes to managing chronic pain. Other treatments to consider include:

- **Exercise:** With limited mobility, muscles can weaken and become achy. So movement is important. Ask your healthcare provider to refer a physical or occupational therapist who can create an exercise program for your loved one and help you move the person's arms and legs to prevent atrophy and further discomfort.
- **Belly breathing:** Breathing from your diaphragm or abdomen activates your central nervous system, which releases endorphins, your body's own painkillers or natural opioids. Breathing from the chest—what many people do when tense—doesn't achieve the same results.
- **Tension reduction:** When overloading or stretching muscles then releasing them, you will experience a greater level of calmness and relaxation. If possible, try yoga.
- **Visualization:** Picture something pleasant, maybe a happy memory or lying on your favorite beach, to help calm you when anxious or afraid.
- **Music therapy:** Listen to your favorite music or nature sounds in a quiet room without any distractions for 10 to 20 minutes each day. (Consider wearing headphones to eliminate external noise.) Or make music. Play the guitar or piano. But don't give your brain other jobs to do at the same time like watching TV because it will diminish the effectiveness.
- **Happy moments:** It's easy to become consumed by pain. Don't forget about the rest of your life. Engage in activities you enjoy like visiting your grandchildren, seeing a movie or dining at your favorite restaurant with friends.

Source: GERALYN DATZ, PH.D., SOUTHERN BEHAVIORAL MEDICINE ASSOCIATES

Our mind has the ability to help us reduce about 30 percent of our pain ... that is often more therapeutic than any medicine.

- Record the time the opioids are taken to avoid accidental overdoses.
- Store opioids under lock and key because they can be tempting to guests or family members.
- Talk with your local pharmacist about how to properly dispose of leftover medicines.

Since all medicines have toxicities, Webster suggests starting with the safest pain medications first. If the pain gets worse, call your healthcare provider. While trained to handle most levels of pain, your doctor may refer you to a pain specialist who can offer alternative therapies.

RIGHT HOOK

While drugs certainly help minimize pain, so can a caregiver's attitude.

"The key issue is that people who experience pain need to be believed," Webster says. "Our mind has the ability to help us reduce about 30 percent of our pain just by the right thought processes and relationships we have with our family. That is often more therapeutic than any medicine."

Science backs up his claim. A 2005 study—The Spouse Response Inventory by Schwartz, Jensen and Romano—involved 104 patients with chronic pain, asking them to complete a questionnaire about how their spouse responds to their pain behaviors, such as groaning. Researchers found that patients were often more severely depressed when spouses responded negatively to their pain, criticizing them or becoming irritated. But when spouses responded positively, the opposite occurred.

More recent research also produced similar results. One study conducted between 2012 and 2013 at Wayne State University involved 128 romantic couples, explains Laura Leong, Ph.D., a clinical psychologist in Toronto who conducted the study.

One partner from each couple was asked to dip his or her

hand into a basin of cold water, which induced pain. Half of the other partners were asked to feel and behave empathically.

"The pain participants reported feeling significantly less pain than the people whose partners did not receive this special instruction," Leong says. "The take-home message is that if a spouse feels more empathy for his or her partner, it can help the partner feel less pain and also feel better understood and supported emotionally."

So can instilling hope, adds GERALYN DATZ, Ph.D., a clinical psychologist at Southern Behavioral Medicine Associates in Hattiesburg, Miss. Roughly 90 percent of her patients experience some form of chronic pain. She says many caregivers don't understand pain and may be overwhelmed with their responsibilities so they search for a cure instead of accepting and validating the individual's pain.

"You can't know another person's pain, and a lot of [caregivers] think it can't be that bad," Datz says. "Ask that person what would be helpful to them right now. There is going to be discomfort, tears and bad days."

Sometimes, pain can be the result of high anxiety. Datz says many admissions to hospital emergency rooms for chest pain are not related to a heart attack or other cardiac issues. Anxiety is often the culprit.

An often simple yet overlooked technique is recording pain events. Pain may be more intense in the morning versus the afternoon or during activities like bathing or dressing. This practice, Datz says, helps patients identify the best times to take pain drugs and possibly reduce the dose or frequency.

While chronic pain can be scary, it's not fatal. "It's the powerlessness that scares people," says Datz. "Don't despair. Have hope that this is manageable."

ONE-TWO PUNCH

Anxiety and fear often make patients more sensitive to pain, says Josephine Briggs, M.D., director at The National Center

Rematch

There is a link between migraines and cardiovascular disease, says Alexander Feoktistov, M.D., Ph.D., director of clinical research of headache and pain management at Diamond Headache Clinic in Chicago.

He explains that migrainers—people suffering from migraine headaches—have a slightly higher risk of developing heart disease. It's important for people with a history of ischemic heart disease, heart attacks or strokes—who already have constricted vessels—to avoid some pain medicines. He points to triptans, which are used to treat migraines, as examples, because they further narrow blood vessels in the brain to relieve swelling but may cause a stroke.

Sometimes, stroke patients or those with other disabling conditions can develop an excruciating headache, called a thunderclap headache. It's often accompanied by nausea, vomiting or sensitivity to light or noise. Don't ignore it.

"This headache is a result of a hemorrhagic stroke," Feoktistov says. "Frequently, patients develop mental status changes where they become confused and disoriented. Those are all red flags that the patient is to be brought to the emergency room."

Another source of trouble can be over-the-counter drugs that contain acetaminophen or ibuprofen (Tylenol™ or Advil™). If patients take too much for too long they can develop rebound headaches, which are chronic, more severe and more resistant to treatment.

Feoktistov says it's important to understand the origin of a headache or what's contributing to the pain. "Never disregard [a headache] or brush it off," he says. "Headaches can be a symptom of an underlying condition."

for Complementary and Alternative Medicine at the National Institutes of Health in Bethesda, Md.

"The Center is currently supporting a number of studies on alternative treatment approaches that involve mindfulness-based stress reduction," she says, adding that one research program is focusing on the brain's role in perceiving, modifying and managing pain.

"Attention to the emotional states and all the things that go along with pain is a big part of pain management," Briggs says. "The emotional state of the caregiver is really an important part. To be reassuring, [establishing] a supportive environment in which the fears of the patient are being addressed, is very much what some of these nontraditional approaches emphasize."

Likewise, don't dwell on the pain. Do something, try anything. And never throw in the towel. Working proactively with healthcare providers can be very therapeutic, she says.

One of the most important points for caregivers to understand is that chronic pain impacts every aspect of the patient's life, including sleep, which is when your body repairs itself, says Ellen Slawsky, Ph.D., clinical psychologist at Pain Management Services, Benson-Henry Institute for Mind Body Medicine at Massachusetts General Hospital in Boston.

She helps many patients and caregivers integrate alternative approaches into the patient's daily ritual to minimize stress or anxiety that can exacerbate pain.

One effective approach is taking full, deep breaths from 5 to 30 minutes, before or during stressful experiences like doctor visits. Do them in the car or the waiting area at the doctor's office. Find a word or phrase that helps calm or center you, repeating it with each deep breath. Some people even count their breaths.

Also consider restructuring negative thoughts. Chest pain, for example, doesn't necessarily signal a heart attack. Slawsky teaches pain patients how to replace fear with evaluation: What is real? Maybe the chest pain is the result of walking up a flight of stairs or arguing with a family member. Maybe there's no need to be distressed. Patients choose their responses, she says, instead of a knee-jerk reaction.

In this culture, many people want a quick fix. They prefer to take a pill and avoid the hard work—caring for themselves. Caregivers need to step in, she says, and encourage loved ones to walk to a neighbor's house instead of driving, eat healthy meals and perform relaxation techniques. Just like it's easier to quit smoking when paired with another smoker, she says caregivers should also practice relaxation techniques alongside their loved one to alleviate their own daily stress.

"The lovely thing is if caregivers start engaging in these techniques, they're going to feel better," says Slawsky. "These stress management techniques and tools are good for everybody." ■



The benefits of **Tai Chi** Healthy body, strong heart

*How
practicing
Tai Chi
can improve
your heart
health*

BY MARK L. FUERST

If you have heart disease, you may want to find a physical activity that you can easily maintain. The slow-paced "meditation in motion" of Tai Chi may be just what the doctor ordered. Based on the existing evidence, Tai Chi is a promising addition to regular heart care.

Cardiac rehabilitation programs are, unfortunately, underused. "Tai Chi may be a good option for those unable or unwilling to engage in other forms of physical activity, or as a bridge to more rigorous exercise programs in frail patients," says Peter Wayne, Ph.D., assistant professor of medicine at Harvard Medical School and the director of research for the Osher Center for Integrative Medicine, jointly based at Harvard Medical School and Brigham and Women's Hospital in Boston. "If your doctor says you have borderline high blood pressure and you are not certain you want to begin drug therapy, a non-pharmacological approach such as Tai Chi may be a way to keep your blood pressure in check. If you have established high blood pressure and find it difficult to engage in a regular exercise regimen, again, think about using Tai Chi to aid the treatment program your doctor has designed for you."

Regular physical activity, including Tai Chi, has beneficial effects on many risk factors for heart disease, such as high blood pressure, high cholesterol levels and pre-diabetes, says Ruth E. Taylor-Piliae, Ph.D., R.N., associate professor and Robert Wood Johnson Foundation nurse faculty scholar alumna at the University of Arizona's College of Nursing in Phoenix, where she conducts Tai Chi research. "Regular physical activity promotes weight reduction, which can help reduce high blood pressure. Exercise can lower total LDL, or "bad", cholesterol levels, as well as raise HDL, or "good", cholesterol levels," she says. "Among those with pre-diabetes, regular exercise can aid the body's ability to use insulin to control blood glucose levels."

Importantly, all studies to date suggest that Tai Chi may be safe for heart patients. It may offer you additional options, whether in addition to a formal cardiac rehab program, as a part of maintenance therapy or as an exercise alternative.

TAI CHI EASES CONGESTIVE HEART FAILURE

Tai Chi may be one of the better ways to help you rehabilitate and manage the effects of conditions like congestive heart failure. "My doctor told me I was almost ready for a pacemaker. I was tired and couldn't endure much," says Pat Finn, a 60-year-old marketing executive who has had congestive heart failure for more than a dozen years. Finn agreed to participate in a clinical study of Tai Chi and congestive heart failure at Harvard Medical School. During the study she learned Tai Chi breathing, strength and flexibility exercises, and a simplified Tai Chi protocol she could practice on her own.

After the study, Finn continued taking Tai Chi classes as well as doing an hour of aerobics twice a week. Three months later, Finn's doctor told her she didn't need a pacemaker after all. "My heart was more stable and I felt stronger," she says. "I had more energy to run my business."

To learn even more about Tai Chi, she began taking a class at a community Tai Chi center. "I always feel more energized after a Tai Chi class," she says. "I have no problem doing two hours of Tai Chi whereas I'm counting the minutes during aerobic exercise. I can easily incorporate Tai Chi into my life. I take breaks at work to do Tai Chi and when I get stressed, I do some Tai Chi breathing to help calm me down."

The research study at Harvard Medical School that Finn participated in, led by Wayne, found that after 12 weeks of Tai Chi, heart failure patients had a better quality of life, walked farther on a six-minute test and had greater decreases in blood levels of a marker for heart failure compared to a control group that had usual care. There were also trends toward improvement in aerobic capacity and more stable sleep in the Tai Chi group.

WHY TAI CHI IS GOOD FOR THE HEART

Tai Chi combines physical exercise, stress reduction, emotional regulation, improved breathing efficiency and social support. All of these target many modifiable heart disease risk factors, says Wayne. What's more, "the gentle, adaptable nature of Tai Chi makes it safe and accessible for people of all fitness and health levels, including those with existing heart disease," he says. Here are a few more reasons why Tai Chi is good for your heart:

Tai Chi is a safe, adaptable form of aerobic exercise. If you watch people practice Tai Chi, it might not seem like they are getting any aerobic benefit. But they are.

Numerous studies have shown Tai Chi is an aerobic activity of low-to-moderate intensity, depending on your training style, how deep you sink into the postures, how fast you move from one posture to the next and the duration of your practice. The physical activity of Tai Chi ranges between 1.6 and 4.6 metabolic equivalents (METs). To put this in perspective, your resting metabolic rate while sitting quietly is equal to 1 MET. The majority of studies report the intensity of Tai Chi at about 3.5 METs, which is about the same intensity as walking at a moderate pace (about three miles per hour) on level ground.

Tai Chi can get your heart rate up from 50 percent to 74 percent of maximum, depending on the type and intensity of Tai Chi and your age. "The ability to modify the intensity of Tai Chi makes it highly adaptable for people based on their level of physical fitness and cardiovascular impairment," says Wayne.

Tai Chi can reduce stress and improve psychological well-being. It can help you manage and reduce stress and improve your mood. It may also help you soften unhealthy, overly aggressive behaviors by increasing your self-awareness and promoting a balanced lifestyle, says Wayne.

Tai Chi improves breathing efficiency. The slow, deep meditative breathing associated with Tai Chi has also been shown to reduce blood pressure, dilate blood vessels, improve circulation, calm the nervous system and improve mood by boosting mental focus and decreasing negative thoughts. The emphasis on breathing from the diaphragm can lessen the heart's work load, says Wayne. "Collectively, these potential benefits of Tai Chi breathing may underlie some of its clinical effects on heart disease."

Tai Chi may improve your confidence to exercise and motivate healthy behavior. Another way Tai Chi enhances fitness and heart health is by giving you the confidence to exercise and motivating you to seek out other healthy behaviors, which translates into greater physical activity. "Tai Chi's meditative, self-reflective components, as well as its connection to Eastern philosophy that supports a balanced lifestyle, may foster your awareness of unhealthy behaviors and motivate you to make more healthy behavior changes," says Wayne. "These changes may include an improved diet and overall lifestyle, which can only help your heart health."

Tai Chi leads to social support. It's a social activity. "As a Tai Chi student, you interact with your instructors and other students," says Wayne. "You may also feel you are broadly connected to a larger community of those who practice Tai Chi regularly." Research suggests that this form of social support and a sense of connection can have a positive effect on your health, including prevention of and rehabilitation from heart attacks, stroke and other heart problems.

For a review of some recent studies of the heart-healthy

**Tai Chi combines
physical
exercise, stress
reduction,
emotional
regulation,
improved
breathing
efficiency and
social support.**



effects of Tai Chi, read our online-only bonus article, "How Tai Chi impacts cardiovascular risk factors," at www.heartinsight.com.

TAI CHI FOR EVERYONE

Tai Chi is a moderate-intensity activity that appeals to adults of all ages, including older adults with chronic illnesses. "If you have a chronic condition, talk to your healthcare provider before you begin a regular Tai Chi program," suggests Taylor-Piliae. Look for a program that offers one of the shorter forms of Tai Chi, especially if you are just starting out. In his book *The Harvard Medical School Guide to Tai Chi* (Shambhala, 2013), Wayne offers a simplified Tai Chi program based on the protocol he uses in his clinical studies.

To make Tai Chi classes more accessible to heart patients, a variety of programs now add Tai Chi into existing cardiac and stroke rehab programs. Classes are also offered in community-based settings such as churches, libraries and senior centers, says Taylor-Piliae. To find Tai Chi classes, especially those teaching a simplified version, contact your local YMCA, Area Agency on Aging or Senior Community Center. Another option is to search for classes online at World Tai Chi Day (worldtaichiday.org) or American Tai Chi (americantaichi.net).

Wayne agrees that the first place to look for a Tai Chi teacher or program is on the Internet. "Just as it is when you search for a doctor, it's worth doing some research to find a Tai Chi teacher," he says. "The Tai Chi school's website will give you some clues about the type of training, how long the teacher has trained and with whom." Be aware that on the Internet, teachers can portray themselves in whatever way they want. "The best way to check out the teacher is to attend a class, where you can see the teacher's style and demeanor, and interact with and receive

feedback from other students," he says. "Finding a teacher is more about feel than an exact science."

Look for an experienced teacher who has long-term students, good teaching skills, good people skills and someone who works in a comfortable environment in a practical location. Also, look for a class that is the right size for you, not too large or too small. Wayne suggests you visit a number of Tai Chi schools to get a sense of what size class you prefer.

Once you have found a class, call the instructor and ask about his or her teaching experience. Has the instructor worked with older adults or those with chronic illness? "The Tai Chi instructor should be able to accommodate your individual health concerns and various levels of your prior exercise experience," says Taylor-Piliae. "Ask about the instructor's teaching style. Does he or she teach a simplified version of Tai Chi? Does the instructor focus on the health benefits of Tai Chi or martial arts/fighting techniques?" Most people do Tai Chi for health reasons, but its origins are based in the martial arts, she notes.

Once you start attending a Tai Chi class regularly, you will begin to feel the beneficial effects. To gain all of the health benefits of Tai Chi, "you need to find your own optimal time and frequency to practice, the best times of day and the most convenient places to do Tai Chi, whether in a class, at home or in a park," says Wayne. A good goal is to do two one-hour Tai Chi classes a week, plus at-home practice for at least 30 minutes, three times a week.

When you do Tai Chi, you feel healthier partly because you are participating in your own healthcare. "You are also more likely to become physically active and engage in other forms of exercise," Wayne says. "Self-discovery is an appealing, lifelong learning skill. Tai Chi can be a lot more fun and meaningful than walking on a treadmill day after day, so you are more likely to stick with it!" ■



Navigating your local farmers market

We all know that eating fresh fruits and vegetables is important for good health, and one of the best places to find them is at your local farmers market. You can't get produce that's much fresher—it's coming direct from the farm to you, rather than being picked before ripening and then shipped long distance to your local grocery store. Prices can be cheaper than grocery stores, too. But don't think that just because you live in the city or the suburbs you can't find a farmers market near you. Farmers markets can be found almost everywhere and are becoming more and more popular. To find one in your area, visit localharvest.org.

When planning a trip to the farmers market, go early in

the morning for the best selection, or later in the day if you're looking for a bargain. Some vendors may lower their prices if there are only a few of an item left so they don't have to pack it up when the market closes. Another way to get a good deal is to buy in bulk, as many vendors offer bulk discounts.

While browsing, be sure to talk to the farmers—they're a wealth of information! Don't be intimidated; they're usually more than happy to talk about their harvest. Ask them about their produce, such as what to look for in a particular type of fruit, which fruits and vegetables are in season and ways of preparing certain vegetables. You might think you have no idea what to do with cauliflower except boiling it, for example, but

the farmer may have some ideas on how to cook it that you've never thought of before.

If eating organic produce is important to you, ask if a certain type of produce is organic if there isn't a sign stating so.

When you're shopping for heart-healthy fruits and vegetables, remember to look for color. The best way to get all of the various nutrients that can help prevent heart disease is to eat a balanced diet with a wide variety of fruits, vegetables and whole-grain products. To encourage variety, think colorfully. Look for *red* (tomatoes, watermelons, strawberries, cherries, pomegranates, apples, raspberries, grapes), *orange/yellow* (carrots, pumpkin, mangoes, apricots, cantaloupes, tangerines, grapefruits, peaches, papaya, pineapple, nectarines, apples), *green* (broccoli, cabbage, bok choy, Brussels sprouts, collard greens, avocado, spinach, kale, green beans, peppers, kiwi, mustard greens, grapes) and *blue/purple* (blueberries, blackberries, grapes, plums, prunes, figs, eggplant).

Look for produce that you've never tried before. Many farmers markets have demonstrations, tastings and recipes available so you can try before you buy. You just might find a new fruit or veggie to love!

Think about shopping at a local farmers market before you make the trip to the grocery store. You can't go wrong with super fresh fruits and vegetables at reasonable prices.



What's the best time of day to exercise?



Morning, afternoon, evening—when do you think is the best time of day to work out? Some people wouldn't think of giving up their 6 a.m. jog because it gets their day going. Others swear by a long walk after dinner to relieve the stress of the day. Which is best?

The answer to that question is a simple one—whatever works best for you. The best time of day to exercise is when you'll do it most consistently, because the key to getting all the benefits of physical activity is to do it on a regular basis. Everybody has different preferences. If you're not a morning person, you may not be able to keep forcing yourself to get up at 5 a.m. to work out. But if you enjoy working out at the gym after work because it helps you wind down, that would be the best time for you.

The American Heart Association recommends at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity. And you don't have to get it all at once! So if you've been putting off exercise because you can't devote a chunk of time to it each day, break it up. You could walk for 10 minutes in the morning (park at the back of the parking lot where you work), another 10 minutes at lunch, and then another 10 minutes back to your car after work. You've just completed 30



minutes of physical activity!

As you can see, whether you exercise in the morning, afternoon or evening—or all three—it's all good, as long as you can stay consistent. When you find a physical activity schedule that works for you, *that's* the best time to exercise.

Life's Simple 7 in a Nutshell

Cardiovascular health encompasses two basic components: ideal health behaviors and ideal health factors.

The behaviors include not smoking, maintaining a healthy weight, meeting or exceeding AHA recommendations for physical activity and eating a healthy diet.

The health factors include blood pressure, fasting blood glucose and total cholesterol levels that are within the AHA's recommended range—preferably without needing medication to keep them there.

Modest lifestyle or behavioral changes can move you in the right direction. And those who make behavioral changes before developing any serious health risks can look forward to a better quality of life and moving toward excellent heart health.

♥ Are you at risk for high cholesterol?



It may surprise you to know that cholesterol itself isn't bad. It is a soft, fat-like substance that your body produces naturally. It helps make new cells, some hormones and substances that help digest foods.

Cholesterol is part of a healthy body. But having too much of it in your blood can be a problem. Too much cholesterol contributes to a higher risk for cardiovascular diseases, such as heart disease and stroke.

If you're between ages 20 and 79, you should have your cholesterol measured every four to six years. If other factors put you at higher risk for heart disease or stroke, your healthcare provider may want to check it more often. Your healthcare provider will do a blood test called a "fasting lipoprotein profile" to measure your cholesterol levels. It assesses several types of fat in the blood. It is measured in milligrams per deciliter (mg/dL). The test gives you four results: total cholesterol, LDL (bad) cholesterol, HDL (good) cholesterol and triglycerides (blood fats). The ideal total cholesterol is less than 180 mg/dL.

In addition to what your body makes, you also get cholesterol from some foods you eat. To improve your cholesterol, choose foods low in saturated and *trans* fats.

Saturated fats are the main dietary cause of high blood

cholesterol. They are found naturally in many foods. They mostly come from animal and dairy sources, such as meat, poultry with skin, cream, butter, cheese and other dairy products made from whole or reduced-fat (2%) milk. The American Heart Association recommends that adults who would benefit from lowering LDL cholesterol limit their saturated fat intake to 5 to 6 percent of total calories each day. For a person who needs 2,000 calories a day, this is about 11 to 13 grams of saturated fat.

Trans fats can raise total and LDL (bad) cholesterol and lower HDL (good) cholesterol. Sources of *trans* fats include commercially baked goods, fried foods and snack foods. They're also found in foods made with partially hydrogenated vegetable oils, vegetable shortening or stick margarine. Everyone can benefit by limiting *trans* fats. Reducing your *trans* fat intake is especially important if your doctor has said you should lower your LDL cholesterol.

In addition to reducing your intake of saturated and *trans* fats, physical activity is important. If you need to lower your cholesterol, aim for 40 minutes of moderate to vigorous physical activity 3 to 4 times per week. If you don't have longer blocks of time, you can exercise in 10-minute segments.



What to eat (and what to avoid) if you have diabetes

If you have diabetes, you know the importance of a healthy diet in managing the disease. Making healthy choices in what you eat is essential, but sometimes it's hard to be sure if you're eating the right foods. Choose foods that are low in saturated and *trans* fats, sodium and added sugars. This list can help you decide what you should eat and what you should limit.

Foods you **SHOULD** eat include:

- Fruits and vegetables (citrus fruit, berries, dark green leafy vegetables, sweet potatoes, tomatoes)
- Fiber-rich whole grains (oatmeal, barley, brown rice, whole-grain pasta, whole-grain corn)
- Fish, especially those high in omega-3 fatty acids (salmon, lake trout, mackerel, herring)
- Chicken or turkey (without the skin)
- Non-tropical vegetable oils
- Low-fat dairy products
- Legumes



Foods you should **LIMIT** include:

- Sweets and added sugars (sucrose, glucose, fructose, maltose, dextrose, corn syrup, high-fructose corn syrup, concentrated fruit juice, honey, soda, fruit drinks, candy, cake, jellies)
- Red meats (beef and pork)
- Sodium (have less than 1,500 mg per day)
- Foods high in saturated and *trans*-fats (butter, whole milk, cheese, coconut and palm oil, hydrogenated oils)
- Partially hydrogenated oils or *trans* fats (hard margarine, foods made with shortening such as some cakes, pastries and pies, cookies, muffins, donuts, French fries)
- Alcohol (no more than one drink per day for women, two for men)



Can e-cigarettes help you quit smoking?

You've probably heard a lot about electronic

cigarettes (also called e-cigarettes, e-hookas, shisha pens and vape pens) as an alternative to regular cigarettes. These devices deliver nicotine by heating it and converting it to a water vapor that contains lower levels of toxins than regular cigarettes—but they could contain chemicals and carcinogens that are harmful to your health.

As for their role in helping someone quit smoking, there is no proof that e-cigarettes can help you kick the habit—as a matter of fact, recent studies have shown that they may even make it harder for you to quit. Researchers have found that smokers who used e-cigarettes were less likely to quit smoking than smokers who didn't use e-cigarettes.

Because e-cigarettes have not been approved by the Food and Drug Administration, good information about the components and their potentially harmful contents is hard to come by. The American Heart Association is among 16 leading national health organizations that have signed a joint letter to President Obama asking for adoption of new regulations for e-cigarettes. They are concerned that they could pose a serious health risk to children and adults.

So if you're thinking that e-cigarettes might be a good way to wean yourself off of regular cigarettes, think again. Talk to your healthcare provider about other ways to quit smoking, and give e-cigarettes a pass.



Resources

Life's Simple 7® Assessments

To understand the steps you may need to take to improve heart health and quality of life, visit heart.org/mylifecheck

Track your heart health

To track your blood pressure, blood glucose, weight, cholesterol and more online, visit heart360.org

Manage your diabetes

To find information on understanding and managing diabetes, visit heart.org/diabetes

Get physically active

For ideas on how to incorporate physical activity into your life, visit startwalkingnow.org

The Bounty of Late Summer

Garden-Fresh Gazpacho

Serves 6; 1 cup per serving

Prep time: 20 minutes

Gazpacho is the ultimate summertime vegetarian dish because it maximizes the garden's bounty and it's served at room temperature or chilled.

Ingredients

2½ cups chopped, seeded tomatoes
1½ cups chilled low-sodium spicy mixed-vegetable juice and 1 cup chilled low-sodium spicy mixed-vegetable juice, divided use

¼ cup chopped red bell pepper
¼ cup finely chopped red onion
¼ cup loosely packed fresh basil

1 tablespoon fresh lemon juice
1 medium garlic clove, minced
¼ teaspoon cayenne (optional)
1 cup chopped seeded cucumber
1 cup quartered yellow pear tomatoes or red cherry tomatoes
¼ cup finely chopped green

bell pepper
¼ cup chopped fresh parsley

Directions

In a food processor or blender, process the chopped tomatoes, 1½ cups vegetable juice, the red bell pepper, onion, basil, lemon juice, garlic, and cayenne until smooth. Transfer to a large bowl.

Stir in the remaining 1 cup vegetable juice and the

remaining ingredients. Serve immediately or cover and refrigerate until serving time.

Cook's Tip

To make a complete meal, increase the serving size to 1½ cups and serve the soup with grilled chicken or shrimp and crusty whole-grain bread.

Nutrients per Serving

Calories	56
Total Fat	0.5 g
Saturated Fat	0.0 g
Trans Fat	0.0 g
Polyunsaturated Fat	0.0 g
Monounsaturated Fat	0.0 g
Cholesterol	0 mg
Sodium	69 mg
Carbohydrates	12 g
Fiber	3 g
Sugars	8 g
Protein	2 g

Dietary Exchanges

2 vegetable



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Summer is waning, but your garden continues to produce like it's the height of the season! Try some of these heart-healthy recipes to help you enjoy the bounty of late summer.

Broiled Salmon over Garden-Fresh Corn and Bell Peppers

Serves 4; 3 ounces fish and $\frac{1}{2}$ cup corn mixture per serving
Prep time: 10 minutes; Cooking time: 15 minutes

Celebrate summer with a dish that marries seasonal local corn, bell peppers, and garden-grown basil and mint with the rich taste of salmon. Serve this dish with brown rice, whole-wheat couscous, or quinoa, and dinner is ready!

Ingredients

Cooking spray
4 salmon fillets (about 4 ounces each), about 1 inch thick, rinsed and patted dry
1 tablespoon chopped fresh basil and 3 tablespoons chopped fresh basil, divided use
1 teaspoon chopped fresh mint and 1 teaspoon chopped fresh mint, divided use
 $\frac{1}{2}$ teaspoon salt and
 $\frac{1}{2}$ teaspoon salt, divided use
 $\frac{1}{2}$ teaspoon pepper and
 $\frac{1}{2}$ teaspoon pepper, divided use
2 teaspoons olive oil
 $\frac{1}{2}$ cup coarsely chopped red onion
 $\frac{3}{4}$ cup chopped bell peppers
2 cups corn kernels, cut from 3 or 4 medium ears of corn, husks and silk discarded

Directions

Preheat the broiler. Line a baking sheet with aluminum foil. Lightly spray the foil with cooking spray.

Put the fish on the baking sheet. Sprinkle 1 tablespoon basil, 1 teaspoon mint, $\frac{1}{2}$ teaspoon salt, and $\frac{1}{2}$ teaspoon pepper over the top of the fish. Lightly spray with cooking spray.

In a large nonstick skillet, heat the oil over medium heat, swirling to coat the bottom. Cook the onion for 1 minute, stirring frequently. Stir in the bell peppers. Cook for 1 minute, stirring frequently. Stir in the corn. Cook for 5 to 6 minutes, or until the onion is soft and the vegetables are tender-crisp, stirring occasionally. Remove from the heat.

Stir in the remaining 3 tablespoons basil, 1 teaspoon mint, $\frac{1}{2}$ teaspoon

salt, and $\frac{1}{2}$ teaspoon pepper.

Meanwhile, broil the fish about 4 to 6 inches from the heat for 5 to 8 minutes, or until the desired doneness.

Transfer the onion mixture to plates. Top with the fish.

Cook's Tip

Look for packages of sweet baby bell peppers in red,

orange, and yellow so you'll have an assortment of colors for this recipe.



Nutrients per Serving

Calories 245
Total Fat 8.5 g
Saturated Fat 1.5 g
Trans Fat 0.0 g
Polyunsaturated Fat 1.5 g
Monounsaturated Fat 3.5 g
Cholesterol 53 mg

Sodium 245 mg
Carbohydrates 17 g
Fiber 2 g
Sugars 6 g
Protein 27 g

Dietary Exchanges

1 starch, 3 lean meat



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Rosemary-Peach Chicken Kebabs with Orange Glaze

Serves 4; 1 kebab per serving

Prep time: 15 minutes; Cooking time: 10 to 15 minutes



End your day on a sweet note with these chicken-and-peach kebabs brushed with a honeyed citrus glaze.

Ingredients

Cooking spray

1 pound boneless, skinless chicken breasts, all visible fat discarded, cut into 16 1½-inch pieces

2 large ripe but firm peaches, cut into 16 1-inch wedges

1 large green bell pepper, cut into 16 1½-inch squares

¼ teaspoon pepper

¼ teaspoon salt

Glaze

¾ teaspoon grated orange zest

3 tablespoons fresh orange juice

1 tablespoon chopped fresh rosemary

1½ teaspoons honey

1½ teaspoons canola or corn oil

Directions

Lightly spray the grill rack with cooking spray. Preheat the grill on medium.

Meanwhile, thread the chicken, peaches, and bell pepper alternately onto four 14- to 16-inch metal skewers. Sprinkle the pepper and salt over the kebabs.

In a small bowl, whisk together the glaze ingredients. Set aside half the glaze (about 2 tablespoons). Brush both sides of the kebabs with the remaining glaze.

Grill the kebabs for 6 to 8 minutes, or until the chicken is no longer pink in the center and the vegetables are almost tender, turning once halfway through and brushing with the reserved 2 tablespoons of glaze, using a clean basting brush. Reduce the heat or move the kebabs to a cooler area of the grill if they are cooking too fast.

Cook's Tip

Ripe but firm peaches are important for this recipe.

The direct heat softens and sweetens the fruit, even if it's not quite at its prime.

Healthy Swap

You can replace the peaches with other stone fruits, such as nectarines and plums.



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Nutrients per Serving

Calories	202
Total Fat	5.0 g
Saturated Fat	1.0 g
Trans Fat	0.0 g
Polysaturated Fat	1.0 g
Monounsaturated Fat	2.0 g
Cholesterol	73 mg

Sodium	206 mg
Carbohydrates	14 g
Fiber	2 g
Sugars	11 g
Protein	25 g

Dietary Exchanges

1 fruit, 3 lean meat

Baby Spinach and Tomato Salad with Warm Olive Vinaigrette

Serves 4; 1½ cups per serving

Prep time: 5 minutes; Cooking time: 5 minutes

When heirloom tomatoes are in season, use any two red and yellow varieties in this simple salad for a beautiful presentation. Year-round, cherry tomatoes provide a bit more sweetness.

Ingredients

- 2 cups baby spinach
- 2 cups torn romaine lettuce
- 1 large yellow tomato, cut into 8 wedges, or 6 mini yellow tomatoes, halved
- 1 large red tomato, cut into 8 wedges, or 6 cherry

- tomatoes, halved
- 1½ tablespoons extra-virgin olive oil
- 2 medium garlic cloves, minced
- ½ cup thickly sliced, canned natural green ripe olives, rinsed and drained
- 1½ tablespoons balsamic vinegar
- ½ cup thinly sliced basil
- Freshly ground pepper

Directions

In a large bowl, toss together the spinach and romaine.

Transfer the greens to salad plates. Arrange the tomato on the greens.

In a small saucepan, heat the oil over medium-low heat, swirling to coat the bottom. Cook the garlic for 1 minute, or until fragrant, stirring constantly.

Stir in the olives. Cook for 1 to 2 minutes, or just until warmed, stirring frequently. Remove from the heat.

Stir in the vinegar. Spoon the dressing over the salads. Sprinkle with the basil and pepper.

Nutrients per Serving

Calories	91
Total Fat	6.5 g
Saturated Fat	1.0 g
Trans Fat	0.0 g
Polysaturated Fat	1.0 g
Monounsaturated Fat	4.5 g
Cholesterol	0 mg
Sodium	120 mg
Carbohydrates	8 g
Fiber	2 g
Sugars	4 g
Protein	2 g

Dietary Exchanges

1 vegetable, 1½ fat

Sautéed Zucchini with Parmesan

Serves 4; ½ cup per serving

Prep time: 5 minutes; Cooking time: 10 minutes; Standing time: 5 minutes

Zucchini spears are lightly browned and then sprinkled with fresh oregano to heighten the flavor of mild summer squash.

Ingredients

- 1 teaspoon canola or corn oil
- ½ cup diced onion
- 2 medium zucchini, quartered lengthwise and cut crosswise into 2½- to 3-inch pieces
- ¼ teaspoon pepper
- 1 tablespoon chopped fresh oregano
- ½ teaspoon salt
- ¾ ounce shredded or grated Parmesan cheese

Directions

In a large nonstick skillet, heat the oil over medium-high heat, swirling to coat the bottom. Cook the onion for 2 minutes, or until beginning to soften, stirring frequently. Stir in the zucchini. Cook

for 6 minutes, or until tender-crisp, stirring frequently.

Transfer to a serving platter.

Sprinkle with the remaining ingredients in the order listed. Let stand for 5 minutes.

Nutrients per Serving

Calories	59
Total Fat	3.0 g
Saturated Fat	1.0 g
Trans Fat	0.0 g
Polysaturated Fat	0.5 g
Monounsaturated Fat	1.0 g
Cholesterol	5 mg

Sodium	163 mg
Carbohydrates	5 g
Fiber	1 g
Sugars	3 g
Protein	4 g

Dietary Exchanges

1 vegetable, ½ fat



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American Heart
Association



Learn and Live

Take **five minutes**
to learn how one hour can
make a lifetime
of difference.

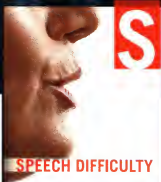
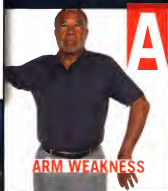
The average person spends 80,000 hours building assets during their lifetime, yet less than 4 hours planning what their heirs will receive. Even more unsettling is the fact that 7 out of 10 Americans die without a will — leaving the distribution of all they have worked for to chance or to the state's discretion. The number one reason people fail to make a will is the belief that it is a complex and expensive process. Not true. Now, in less than one hour, you can begin creating a plan that will protect your hard-earned assets and ensure your wishes are known and followed. Our **will and estate planning kit**, *Matters of the Heart*, can help you save time, money and hassle with forms that quickly organize everything you own into an inventory.

To get your free copy, simply call 888-227-5242. You can also e-mail us at plannedgiving@heart.org or visit us at americanheart.org/plannedgiving.



We advise you to seek your own legal and tax advice in connection with gift and planning matters.
The American Heart Association does not provide legal or tax advice.

Body language
can tell you all
sorts of things.
Like someone is
having a **stroke**.



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Know the sudden signs.
Spot a stroke **F.A.S.T.**



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FOR YOUTH DEVELOPMENT®
FOR HEALTHY LIVING
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Diabetes Prevention Program

DID YOU KNOW?

79 MILLION
AMERICAN ADULTS HAVE
PREDIABETES

ARE YOU AT RISK?

Diabetes is a leading cause of heart disease, stroke, blindness, kidney and nerve disease. Taking action can prevent or delay this disease, but those who have prediabetes and do not take action will likely develop type 2 diabetes within 10 years.

IMPROVE YOUR LIFE

and reduce your risk for type 2 diabetes.

LET'S GET BETTER TOGETHER

In the YMCA's Diabetes Prevention Program, you can work with others in small groups and learn to live a healthier life. Trained Lifestyle Coaches help you build healthy habits over a **12 month period**. You'll start with 16 weekly sessions and then graduate to monthly check-ins.

A lot can happen in one year. When you eat healthier, increase your physical activity and lose even a modest amount of weight you can prevent or delay the development of type 2 diabetes even if you're at high risk. Learn more about your risks and get the support you need for healthy changes.

To learn more and find a program near you visit
www.ymca.net/diabetes-prevention

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National Council of Young Men's Christian Association of the United States of America ("YMCA of the USA"), has made a commitment to collaborate on efforts to support a national movement to increase awareness and take measures to prevent diabetes and its complications among groups at risk, and to help support treatment outcomes for individuals who have confirmed diagnoses or indications of prediabetes by promoting an effective lifestyle change. The parties referenced above do not warrant or guarantee any specific outcomes for program participants, with respect to diabetes prevention.

The YMCA's Diabetes Prevention Program is part of the Centers for Disease Control and Prevention-led National Diabetes Prevention Program and is nationally supported by the Diabetes Prevention and Control Alliance. The American Heart Association and the Y are working together to prevent diabetes—a leading risk factor for heart disease and stroke.

YMCA of the USA selected 17 communities nationwide to offer the YMCA's Diabetes Prevention Program at no cost to qualifying Medicare beneficiaries. This project is made possible by funding opportunity number 1C1CM5330965 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services.

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